The Open Court.

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Devoted to the Work of Conciliating Religion with Science.

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THE OPEN COURT,

(Nixon Building, 175 La Salle Street,)

P. O. DRAWER F. CHICAGO, ILL.

THE OPEN COURT is not exclusive or sectarian, but liberal. It desires to further the efforts of all scientific and progressive people in the Churches and out of them, towards greater knowledge of the world in which we live, and the moral and practical duties it requires. To this end it asks for circulation in the Churches, and also in all Ethical, Secular, and other Liberal societies. It hopes for a well-wishing co-operation in what all must admit to be true, good, and practical in the conduct of life, iudividual and collective.

DEFINITIONS EXPLANATORY OF THE POSITION OF "THE OPEN COURT."

THE DATA of experience are perceptions.

REALITY is the sum total of all that is.

TRUTH is the conformity of cognition to reality.

[Truth being a relation between subject and object appears to be relative in its nature. Absolute truth is a self-contradiction; it would imply cognition without a cognizing subject.

At the same time it is obvious that absolute existence (in fact everything absolute) is impossible. Reality is properly called *Wirklichkeit* in German, derived from *wirken*, to take effect. Reality is not immovable and unchangeable absoluteness, but the effectiveness of things in their relations. Reality therefore implies not only existence, but the manifestation of existence also. Existence and its manifestation are not two different things; both are one.

The idea of something absolutely Unknowable is therefore also untenable; it would imply the existence of an object whose existence is not manifested *i. e.*, existence without reality; *Sein ohne Wirklichkeit*—which is a contradiction, an impossibility.]

SCIENCE is the search for truth.

The nature of science is the economy of thought. (*Mach.*)

Economy of thought is possible through application of the laws of form to thought.

KNOWLEDGE is the possession of certain truths.

[Knowledge is, so to say, the present stock or capital with which Science works. Science cannot exist without knowledge. The object of Science is not only to increase and enlarge knowledge but also to purify the present stock of knowledge from vagueness, errors, and misconceptions.

The purpose of knowledge is that of increasing our power over nature.]

MONISM is that philosophy which recognizes the oneness of All-existence, and the Religion of Monism teaches that the individual, as a part of the whole, has to conform to the cosmical laws of the All.

RELIGION is man's aspiration to be in harmony with the All.

[Religion has been defined differently in the columns of THE OPEN COURT, but all definitions that have been presented are in strict agreement. Mr. Hegeler in No. 25, defines Religion as "man's union with the All" (taking the definition from the Lutheran Catechism "Religion ist der Bund des Meuschen mit Gott durch Gott," and replacing the Word Gon by the more comprehensive word THE ALL). The editor has defined Religion as "man's consciousness of his relation to the All" (No. 24); as "Das Allgefühl im Einzelnen," the All-feeling in the individual (see foot-note page 965); as "man's conception of the world that serves him as a guiding-star through life" (page 1180).]

MORALS are man's conduct in so far as it is in unison with the All.

[The basis of morality is religion. A moral educator or preacher may justly be asked, "On what authority dost thou justify thy precepts?" And he will tell us that his authority is not personal; he speaks in the name of universal order. Accordingly his authority is that of religion. Ifi t were not so, all his good precepts would have no foundation; they would hover in the air like beautiful dreams that have no reality.]

ETHICS is the Science of Morals; it teaches man why he must, and how he can, regulate his conduct so as to be in unison with the All.

Natural history and the history of mankind prove that here on earth a constant progress takes place developing ever higher forms of existence.

Morally good are those acts which are in harmony with the All, *i. e.*, those which enhance progress, and *morally bad* are those which are not in harmony with the All, *i. e.*, those which retard or prevent progress.

[Religion (man's aspiration to be in unison with the All) has naturally produced many superstitious notions in the world, of its origin, and of its purpose. Similarly, science (man's search for truth) has produced many errors or false notions of reality. But all the superstitions of religion do not prove that religion as such is an illusion, and all the errors of science are no evidence that science as such is a sham.

It is obvious that religion and science, as here defined, are not contradictory to, but complementary of, each other. If religion and science do not agree, it is a certain sign that our conception of either the one or the other is wrong. The history of the human mind has been one of constant conflict and reconciliation between religion and science. Their relation has repeatedly been disturbed and re-adjusted.

The unitary conception of the world affords the only basis for the union of Religion and Science, and opens a new vista of progress for both.]

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THE LIBERAL'S FOLLY.

There was a man in the Fatherland to whom liberty was dearer than life. He bravely stood up against the Government and against the Church, for both proved oppressive, both curtailed the liberties of the people. There was no freedom in the Old Country, and no hope of ever attaining freedom. So this man left his home and the place of his childhood; he crossed the Ocean and came to the Land where the Stars and Stripes float in the breeze as an emblem of the new ideals that have become actual facts under our western skies.

This man arrived here poor, but he was industrious, frugal, and intelligent. He worked first as a laborer, then as a mechanic, then as an inventor. He earned money and he saved money; first cents, then dollars, then hundreds, and then thousands of dollars. After a life of energetic labor he had become one of the wealthiest citizens of his adopted country.

He had children and they were educated according to his principles. They should not be suppressed, as he had been during childhood; they were brought up in liberty.

To-day this man is broken-hearted. Part of his wealth is gone, through the imprudence and folly of his son. Everybody had seen it, but the father had not, that his son brought up in liberty had become a scamp, a foolish, rude lout, a boisterous scape-grace. The father had enjoyed the pranks of the frolicking child; but he was disappointed when the adult son repeated the same pranks in business—not to mention other dissipations and follies.

Who is that man? His name is legion. Look around, and you will recognize him at every turn among your acquaintances and your business friends. This man can almost be considered as the typical Liberal. It is not always his immediate son who thus shows the folly of his errors; in many cases it is the grandson or the child of the grandson. For the virtues of the parents remain a blessing to the second and third generation. The capital of moral strength is not suddenly exhausted; yet it dwindles away rapidly.

The children of men of this stamp sometimes still remain in possession of their father's wealth. If not laborious and industrious, yet they are shrewd business men, sometimes unscrupulous too; but they have mentally and morally degenerated, and in the place of the republican simplicity of their grandsire they assume aristocratic habits. They are ashamed of the honesty, the industry, and frugality of their ancestors and make themselves ridiculous as servile imitators of European nobility.

Let us institute an aristocracy of the mind, and of loftiness of aspirations. Rotten is every nobility that boasts of wealth. It is a shame that we Americans, "the brave and the free," are always vaunting in the face of foreigners the immeasurable, inexhaustible riches of our country. It is a poor country where that is the best to be gloried about, and it is a poor man whose riches are everything of value that he possesses. Let us cease to admire the rich because they are rich; and ye, the moneyed aristocracy, cease to pride yourself upon your possessions. The pride of wealth is the lowest kind of pride, the meanest, the poorest!

But ye liberals, beware that ye are not under the same curse as the typical liberal. Ye liberals have a great mission, for ye are the salt of the earth: but if the salt has lost his savor, wherewith shall it be salted? It is thenceforth good for nothing, but to be cast out and to be trodden under foot of men.

Liberty is a great thing and we should give, if need be, our lives for liberty. But liberty must be deserved; it must be the fruit of our labor. Do not be deceived by the false prophets who preach in high-sounding words, who promise happiness and enjoyment, and then decoy you into the abysses of the pleasures of the world. They come to you in sheep's clothing, but inwardly they are ravening wolves; they tell you that liberty enlightens the world. Do not be deceived, for it is just the reverse. Liberty does not bring enlightenment, but enlightenment brings liberty; and there is no liberty which is not based on enlightment, on education, on culture, on morality, on wisdom, and good will.

The impoverished immigrant is the fool of whom the gospel speaks. His ground had brought forth plentifully, and he thought within himself, saying, What shall I do, because I have no room where to bestow my fruits? and he said, This will I do: I will pull down my barns, and build greater; and there will I bestow all my fruits and my goods, and I will say unto my soul, Soul thou hast much goods laid up for many

years; take thine ease, eat, drink, and be merry. But God said unto him, 'Thou fool, this night thy soul shall be required of thee, then whose shall those things be, which thou hast provided?' So is he that layest up treasures for himself, and is not rich toward God. For a man's life consisteth not in the abundance of the things which he possesseth, but in the abundance and purity of his soul.

The rich man was a fool because over the cares for worldly goods he forgot the one thing that is needed. He neglected his soul; and his soul was taken from him.

The man to whom liberty was dearer than life neglected his soul and he neglected to build up the souls of his children. Thus they degenerated and involved their old father in their own ruin.

You liberals call yourselves free-thinkers and you rail from the platform at the churches and at religion. Ye blind guides! Why behold ye the mote that is in your brother's eye, but perceive not the beam that is in your own eye? Either, how can you say to your brother, Brother let me pull out the mote that is in thine eye, when you yourself behold not the beam that is in your own eye? Ye hypocrites, cast out first the beam of your own eye and then shall you see clearly to pull out the mote of your brother's eye.

How insignificant is the mote in Mr. Gladstone's eye in comparison to the beam of Mr. Ingersoll's, in spite of his great attainments and enthusiastic sincerity! Can the blind lead the blind? Shall they not both fall into the ditch?

It is true that our churches and the dogmatic tenets of the churches are full of errors, and religion as generally taught, is defaced with superstitions. But the freethinker who casts away religion is like the bear of the hermit. To drive away the fly on the face of his master, he crushes his head and kills him.

You hate oppression and yet you make your children slaves of their follies. You love liberty but you shut the door to that enlightenment without which liberty is impossible. The Churches with all their errors are by far superior to the wiseacre who destroys only, but does not build!

It is not the churches you should oppose, but the errors of the churches; it is not religion you should destroy, but the superstitions of religion! If you undermine the basis of ethics in the name of Liberty, then you are the salt that has lost its savor.

The churches have repeatedly refused to be the leaders of humanity. Whereat liberal thought was called upon to shape the future destinies of man. Ye men of a liberal mind and of progressive views, ye are now expected to be the masterbuilders, to lay the foundation. But it appears that on you the word will be fulfilled again. Many are called, but few chosen. The many have again rejected the only foundation upon which the temple of humanity can be raised.

Our people will pay dearly for the errors committed by the blind guides. The cornerstone of man's welfare is religion, and if man will live, he must take care of his soul. Tear down religion, neglect the most precious treasures that are entrusted to you, the souls of yourselves und your children, and you will reap the destruction which you deserve. The masses of our nation seem to be blind to the truth. They follow the false prophets. But let us not despair, for in the end our people will bethink themselves of the right path. Then religion shall be raised up again and the rents therein shall be closed. Then the prophetic word will come true again: The stone which the builders rejected, the same is to become the head of the corner!

THE ANALYSIS OF LANGUAGE.

BY PROFESSOR F. MAX MÜLLER.

We saw at the end of our last lecture by what process the constituent elements of a language can be discovered. It is a very simple process. You take a word, remove from it all that can be accounted for, that is, all that can be proved to be purely formative and derivative; and what cannot be accounted for, what cannot be further analyzed, you accept as an element, as an ultimate fact, or, as scholars are in the habit of calling it, as a root.

Now let me tell you, first of all, that this chemical analysis of words is by no means a new invention. It was performed for the first time more than 2,000 years ago by the grammarians of India. They reduced the whole of their abounding language to about 1,706 roots.* Given these roots, they professed to be able to account for every word in Sanskrit, and to a certain extent they achieved it. Considering the time when that experiment was carried out, it strikes us as perfectly marvellous. Still, we have made some advance over Pâṇini, and Mr. Edgren has reduced the number of necessary roots to 816, afterwards to 633, and at last to 587.† With these roots he thinks that the great bulk of the Sanskrit vocabulary can be accounted for. And here again we may say that, with certain well-understood exceptions, this promise has been fulfilled. For instance, the root *bar*, or *bhar*, particularly if we include the words derived from Latin *ferre* and adopted in English, such as, for instance, *fertile*, *far* (barley), *farina*, barley-flower, *reference*, *deference*, *conference*, and all the rest, would yield more than a hundred English words. We should not want therefore more than a hundred such roots to account for 10,000 words in English. Now, as a matter of fact, the number of Aryan roots which have left offspring in English, is

* *Science of Language*, vol. i, p. 306.
† *Science of Thought*, p. 377.

only about 460.* When all the offspring of a root dies, of course the root itself comes to an end, and this is what has happened to a number of roots which are required to account for words in Sanskrit, Greek, and Latin, but no longer, for any words existing in English.

It stands to reason that all these statements are broad statements. There is in every language a considerable residue of words which has not yet been traced back to any root. There are likewise many words which are not to be derived from roots at all, but come straight from imitations of sounds, or interjections. To this class belong such words as *cuckoo*, *moo* (cow), *bah* (lamb), *to click*, *to hiss*. The Greeks called the formation of such words *onomatopoeia* or word-manufacturing, by which they meant that they formed a class by themselves, that they were mere made words, artificial words, not real and natural words, like all the rest.

Besides there are interjections, such as *ah*, *oh*, *fie*, *pooh*, *pah*, and all the rest.

Still, to put the matter broadly—and I cannot here attempt more than to give you the broad outlines of the Science of Language—we have now come to this. Instead of being startled and staggered by 250,000 of words, all crowding in upon us and asking us what they are and whence they came, we are now only confronted by four or five hundred words or roots, and have to render some account of them. If we can do that, the world-old riddle of the origin of language is solved. How from these roots the whole wealth of English was evolved has been shown by Comparative Grammar. Here all formative elements, such as suffixes, prefixes, infixes, all case-terminations, all personal and tense-terminations, have been classified, and traced back, more or less successfully, to so-called demonstrative elements. Here also much remains still to be done, but the broad fact is established once for all, that all we call grammar is the result of synthesis between predicative roots and demonstrative elements, often also between words, ready made.

Thus *birth* was originally *bhar*, to bear, *plus* a demonstrative element *ti*, in English *th*, which localizes the act of bearing here and there.

The Sanskrit bi-bhar-mi shows us the same root reduplicated, so as to express continuous action, and followed by mi as a personal demonstrative. *Bearing-I* comes to mean, I bear.

The English *bear-able* is a compound of *bear* with the Roman suffix *able*, the Latin *abilis*, which expresses fitness.

Instances of composition of ready-made words, we have in English in such words as *huzzy*, which stands for *housewife* ; or *world*, which stands for *ver=man*, and *eld*, age ; *god-less*, which means loose or away from God ; *god-ly*, which means like God.

We have now to face the final question, What are these roots? If we can answer that, we shall know what language is. We shall not simply stare at it in silent wonderment, nor shall we repeat the old answer that we learnt it from our mother, and our mother from her mother, and thus *ad infinitum*. We shall probably wonder at it all the more, but with an intelligent wonder and pleasure, and not simply with a vacant stare, that so much could have been made out of so little.

All roots which we find in English, in Sanskrit, or rather in that stratum of language which lies even beneath Sanskrit, are perfectly definite in sound. Their consonants are guttural, dental, or labial, surd, sonant, or aspirated. These consonants can be modified according to certain rules, but they are not vague and indefinite, as is often the case with the vowels and consonants of less developed languages.

Secondly, they nearly all express acts, such as bearing, striking, pushing, cutting, tearing. And you will find, if you trace even the most abstract and elevated notions back to their original source, they are borrowed from such material concepts as tearing, pushing, and all the rest. *Abstract*, for instance, is what is torn away, *elevated* what is pushed aloft.

Thirdly, they are all conceptual, that is to say, they do not express a single percept, as, for instance, the sound of *cuckoo*, or *moo*, or *bah*, but they signify acts, or qualities, conceived as the result of acts. *Percept*, as you know, is the technical name given to our cognizance of a single object actually perceived by the senses ; while concept is the technical term for our cognizance of something common to several objects, which can never by itself be conceived by the senses. Thus *snow* is called a percept, the *white* of snow a concept.

When logicians ask, how we came to form concepts, they seem to see no difficulty whatever in this process. There was *white* in snow, in chalk, and in milk ; and the sign for this common quality was the sound *white*. So, no doubt, it is with us ; but in the evolution of the human mind, the forming of concepts represents quite a new epoch, and like everything else in that evolution, we must try to discover some natural necessity for it. Now the first natural necessity for our taking cognizance of two or more percepts as one, lies in our own acts. Most of our acts are repeated acts. We do not strike, or push, or rub once only, but repeatedly. This consciousness therefore of our own repeated acts as one action, grew by necessity into our first conceptual knowledge, and that primitive conceptual knowledge is embodied in those very roots which, as we saw, were the feeders of all human

* Skeat, *Etymological Dictionary*, pp. 729, seq.

speech. When this conceptual tendency was once started, it would go on growing stronger with every new generation, till at last our whole intellectual life became, as it now is, conceptual. It is the beginning of this peculiar mental operation that has to be explained, and it should be explained, if possible, as brought about by the same natural necessity which forces us to see and to hear. I do not say that the consciousness of our own repeated acts is the only possible way in which the beginning of concepts can be explained. All I say is that it is the most natural explanation, and that it is confirmed in the most unexpected way by the facts of language.

One more question now remains. Why should the consciousness of our acts be accompanied by certain definite sounds, such as *bhar*, to bear, *mar*, to rub, *stâ*, to stop, *tan*, to stretch? Here again our answer can only be hypothetical. Often though we cannot drive our shaft into a deep geological stratum, we can guess by analogy what its constituent elements must have been. It is the same in the geology of language.

With regard to the sounds accompanying our notions, we know from physiology that under any muscular effort it is a relief to the system to let our breath come out strongly and repeatedly, and by that process to let the vocal cords vibrate in different ways. That is the case with savages, and it is the case even with us. These natural sounds accompanying our acts, are called *clamor concomitans*. Navvies when they have to lift a heavy weight together, shout *Yo heo*. Sailors when they pull together, have their own monotonous song. Even children when they march or dance, break out naturally in some kind of rhythmic singsong. Here we have at all events a hint,—for I will say no more,—how this natural music which accompanied the acts of early people, this *clamor concomitans*, could have supplied the outward signs of the inward concepts of these acts. What we want are natural signs of concepts, not of percepts. If our thoughts and our language consisted of percepts only, the sound of *cuckoo* for the cuckoo, of *moo* for cow, and *bah* for lamb would have been amply sufficient. But we must take language as it is. Language as it is, is derived from sounds which express the consciousness of our acts, and which are *ipso facto* conceptual. Such sounds can be supplied, as it seems to me, through one channel only, namely, from the sounds which accompany our acts, and particularly such acts as are performed in common with our fellow-men. From the fact that these primitive acts were performed in common, another advantage arises, namely, that the sounds which accompany them, and which afterwards are to remind us of them, are naturally understood by others as well as by ourselves, in every part of the world where a beginning of social life is made.

Let us see now what are the results at which we have arrived, not by *a priori* theories about language and thought, but by a mere analysis of facts, of the facts of language, as garnered in our dictionaries and grammars.

We found that a small number of insignificant little syllables, such as *bhar*, or *dhar*, or *mar*, or *pat*, or *man* formed the elements with which the whole English language had been put together. We found that a somewhat larger number sufficed to account for the whole verbal harvest of all the Aryan languages, such as Sanskrit, Persian, Greek, Latin, Russian, German, and Welsh. I may add that a similar analysis of the Semitic languages, such as Hebrew, Syriac, and Arabic has led to exactly the same result, and that in other families of languages also, outside the pale of Aryan and Semitic, something corresponding to our roots has been discovered as the residue of a careful etymological analysis.

We may now with perfect safety make another step in advance.

These so-called roots, these insignificant little syllables, which form the foundation of all that we call language, form at the same time the impassable barrier between man and beast. Whatever animals may be able to do—and no one who has watched intelligent animals without preconceived opinions, can doubt that they can do almost everything that we do, only in their own way—but whatever the cleverest animals are able to do, they cannot form these little syllables as signs of concepts. And as what we mean by a concept cannot come into existence except by a sign, we may argue, with a certain amount of plausibility, that animals have not what we call concepts, and that this is the true reason why they have not what we mean by language. It may seem a very small matter, this being able to use a number of syllables as signs of concepts; but it forms nevertheless the *sine quâ non* of language, and no one will venture to say that language is a small matter, even though it consists at first of 300 words only. The first rays of language, like the first rays of the dawn, change the world from night to day, from darkness to light, from a strange phantom into our own home. However humble we may try to be, no one who really knows what language means, and what it has done for us, will be able to persuade himself that, after all, there is not a radical difference between him and the parrot, the elephant, or the ape.

Here then, is one of the lessons which the Science of Language teaches us. It opens our eyes at first to the marvellousness of language, and makes us see that the language which we speak, and which seems to us so very simple, so very natural, so very familiar, is really something so magnificent, so wonderful, so different from everything else we have or do or know,

that some of the wisest of mankind could not help themselves, but had to ascribe it to a divine source.

It shows us secondly that, like all the most marvellous things, language also, if carefully studied, discloses a simplicity more wonderful even than its supposed complexity. As chemistry has shown us that the whole universe, the sea and the mountains, the earth and the sun, the trees and the animals, the simplest protoplasm and the most highly organised brain, are all put together with about sixty simple substances, Comparative Philology has taught us that with about 400 simple radical substances, and a few demonstrative elements, the names and the knowledge of the whole universe have been elaborated. Only by being named does this universe become our universe, and all our knowledge, the accumulation of the labor of countless generations, is possible only because it could be handed down to us in the sacred shrine of language. Let us be humble, as much as you like; but on the other hand, let us not depreciate our inheritance. We have not made our language ourselves, we have received it. We are what we are by what those who came before us have done for us. Like the coral islands which have been built up by the silent and self-sacrificing industry of millions of millions of living beings, our languages have been elaborated by the incessant labors of millions of millions of those who came before us. Whether those ancestors of ours were hairy, whether they had tails, whether they walked on all fours, or whether they climbed trees—what does that matter to us? Our body is a mere conglomerate of cells. It comes and goes, it is born and dies. It is not ours, it is not our own self. But whatever these prehistoric ancestors of ours may have been, they were able to bring to maturity and to compound in ever varying forms those intellectual cells which, for want of a better name, we call roots, and which constitute a barrier between ourselves and all other living beings—a barrier which fortunately does not vanish by being ignored. The Science of Language, better than any other science, teaches us our true position in the world. Our bodily frame is like the bodily frame of the animals; it is even less perfect than that of many animals. We are beasts, we are wild beasts, and those who have fought with wild beasts, not only at Ephesus, but within the arena of their own hearts, are least likely to forget that lesson. But there is a light within us, which not only lights up our own true self, but throws its rays upon the whole world that surrounds and holds us. That light is language. Take away that language, and man is lower than the dumb animals of the field and of the forest. Give us that language, and we are not only higher than all animals, but lifted up into a new world, thinking thoughts and speaking words which the animal may obey, may even imitate, but which no animal can ever create, or ever impart to its own offspring.

THE ROLE OF SUGGESTION IN PHENOMENA OF DOUBLE CONSCIOUSNESS.

BY ALFRED BINET.

We shall conclude our investigation of the subject of double consciousness, by attempting to define accurately the relations existing between the phenomena treated of and those of suggestion. The subject of suggestion has been extensively and carefully studied, of late years, in France. At the present day, the facts of this department are the best known and the least discussed. They are daily reproduced in our hospitals upon subjects of the most diverse characters; and they will undoubtedly soon take their place in the current practice of medicine. Some writers, of a type of mind too prone to generalization, have exaggerated the importance of suggestion, and are determined to find suggestion at every turn; they have asserted even, that suggestion is the sole cause and key of all physical and moral phenomena capable of being provoked in hypnotized subjects.

Owing to repeated experiments, it is comparatively easy to give a fairly precise definition of suggestion; and such a definition is absolutely necessary if we desire to avoid the error committed by many writers who have come to explain everything by suggestion only because they confound under this convenient term things that are quite different. First of all, suggestion implies, in the majority of cases, the setting into activity of the intellect of the subject; it is pre-eminently a psychological phenomenon. When a hypnotized subject, for example, is told that there is a snake or a bird in front of him, and when, following thereupon, he fancies he sees a serpent crawling at his feet, or a bird flying in the air, this constitutes a suggestion, for, to provoke the hallucination, an appeal has been made to the intellect of the patient. The same result may be reached without making use of words to convey to the subject the thought in question: oftentimes a simple gesture, a sign, an attitude, or even the form of the experiment, are sufficient to apprise the subject of what the experimenter wishes; and the thought that the latter has in mind is often hit upon and carried into execution by the subject with a rapidity and a sagacity that are astonishing. In this phenomenon we come upon one of the greatest obstacles and one of the most easily committed errors attending psychological experiments with hypnotized subjects.

A second feature of suggestion, at least in the majority of cases, is the assumption of an influence exerted by one person upon another. The subject of the suggestion is at the orders of the experimenter; he listens, he appropriates the latter's thought, he feels every-

thing the experimenter desires him to feel, obeys every wish and every caprice the experimenter entertains. The instances of resistance offered, frequently met with, are evidence of incomplete hypnotization or of incomplete suggestion. Of the observations that firmly establish this passive obedience on the part of the subject, I shall cite that of M. Richet which I deem very remarkable. The experiment was conducted with one of his friends, whom, after having been put to sleep, M. Richet compelled to pick up, twenty times in succession, a piece of chalk that he kept throwing under the table.

Such is what contemporary authors understand by suggestion. The notion currently entertained thereof may be explained by putting it some such form as this, namely, that it is the setting into activity of the intellect of a subject by another person, who exerts upon the subject a power more or less absolute.

I have no hesitation in declaring, for my part, that a definition of this sort is beyond question insufficient and that it would be unsafe to accept it; it is much too broad; it comprehends too many facts; it comprises, in effect, all psychology, and on this score every psychological phenomenon becomes a phase of suggestion—a state of affairs that would divest words of their worth and complicate all questions involved. With a very few authors, among them M. Pierre Janet for example, I hold that we must restrict the term suggestion to cases, precisely determined, in which a subject carries into effect a given phenomenon because he has previously had the idea of it. He has conceived the phenomenon, he has willed it, or at least he has given it his adhesion, and he carries it out. Such is suggestion. For example, we tell him to steal a handkerchief; he understands what we require of him, and does it. Or perhaps, we tell him that his picture is drawn upon a sheet of white paper; he understands what is told him, he represents to himself the portrait and believes he sees it. In all these cases, we establish, when we analyze them, the fact that the subject is conscious of the end that he pursues and that the experimenter has indicated it to him.

A psychologist will have no difficulty in recognizing that suggestion, understood in the sense last indicated, pre-supposes a great number of intellectual elements. It appeals, in the first place, to the functions of perception, then to the functions of ideation, of comprehension; the entire intelligence can, in certain cases, intervene in the shape of reasoning, of memory, and of imagination; and finally, the will, the emotions, the entire personality of the subject may play a part in it, be it by engaging in the suggestion, be it through modifying the same, or in opposing it. Suggestion clearly represents an intellectual activity that is extremely elevated and complex.

But it is plain that all the manifestations of the mind can not be referred to a phenomenon of this kind, as type. Every one possesses, within the sphere of his psychological life, acts of a more simple, of a more elementary order; and these more elementary acts must, in hypnotized subjects, plainly be retained. The following are instances of such acts. If some one sharply strike our knee, at the tendon just below the cap, while our legs are crossed, we will suddenly lift and extend the leg outward; if a person, behind us, strike, unawares, a vigorous blow with a stick upon a Chinese gong, we will be stunned by the deafening sound for which we were unprepared, and will make a gesture of surprise or of fright, or we will give forth a cry. We have here, it may be said, elementary psychological phenomena; which do not contain a trace of suggestion, for we have not had the idea or the intention of making a movement of our leg before receiving the blow at the knee, or the idea of crying out before having heard the noise made by the gong. Now the fact that these phenomena are produced in hypnotized subjects is no reason that they should alter in character, and we believe, accordingly, that suggestion does not comprehend all psychological phenomena.

The reader is now well enough acquainted with the subject to understand why it is insufficient to explain everything that takes place in hypnotized subjects by invoking the hackneyed term suggestion. "Suggestion," people say. And that suffices for all purposes, that explains everything, and like the panacea of the ancients it cures everything. As a matter of fact, theories of suggestion, thus invoked, amount to nothing less than make-shifts to save people the trouble of serious and delicate investigation.

We have now come to the especial subject of our inquiries. Without doubt, we shall find here suggestion; but it is not suggestion that explains the division of consciousness in hysterical patients, at least the spontaneous division observable in persons affected with anæsthesia. Far from being the cause of the division of consciousness, it is its effect. This latter idea was first propounded by M. Pierre Janet, and appears to me eminently correct. A word will suffice to elucidate it.

Suggestion, when successful, consists of an idea impressed upon a person and reigning dominant in the consciousness of that person; reason, critical powers, and will are impotent to restrain it. If a subject believes he is holding a bird upon his knee, in consequence of the simple fact that I have told him so, the conclusion evidently is that he has lost the power of controlling, examining, and judging the ideas given him. For suggestion to develop itself, accordingly, it is necessary that the subject's field of consciousness do not contain too many antagonistic ideas. Now, it is

exactly this psychological situation that is found realized in the duplication of consciousness. As a consequence of such a phenomenon of bipartition, each of the consciousnesses occupies a more narrow and more limited field than if there existed one single consciousness containing all the ideas of the subject. This retrenchment of the field of consciousness constitutes what is called suggestibility.

We are able, to a certain extent, to test directly the exactitude of the interpretation indicated, by recurring anew to the experiments set forth in our previous articles. When an hysterical subject presents an anæsthesia of half of the body, the sensations received into that half form, as we have seen, a consciousness distinct from the principal consciousness. Now, in many subjects, this second consciousness appears to occupy a field of activity much more limited than the principal consciousness, for the suggestions given it are executed in a more automatic manner. For example, let us command the subject, that is to say, the principal consciousness, to take a pen and to write his name; perhaps the subject will obey our injunction, but it is also possible that he will resist it, and that in the waking state he will be very slightly susceptible to suggestion; the field of his consciousness includes a certain number of antagonistic ideas against which a struggle must ensue, and over which victory is not always certain. But the case is quite different when, without saying a word to the subject, we slip a pen into his anæsthetic hand, and make him trace a word behind a screen; the anæsthetic hand, in the majority of subjects, does not hesitate to re-write the word; indeed, it will write it successively a great many times —proving the limited power of initiative of the impoverished consciousness that receives the sensations of the anæsthetic member. This incessant repetition of the same graphical movement has been discovered in several pathological cases, and the name of "verbigeration" has been given it. This absence of the power of initiative action is indeed so great that in the majority of subjects that I have studied, a suggestion of conduct or action through the intermediary agency of the anæsthetic hand could not possibly be effected. If we cause to be written by the anæsthetic hand the orders "Cough," "Sing," "Get up," the hand will reproduce automatically the order written, but the act suggested will not be carried into execution. This circumstance shows us that the phenomona of automatic imitation constitute an inferior psychological life.

M. Pierre Janet, whom I have frequently cited—for he has pushed his investigations very far upon this particular question and his conclusions often coincide with my own—has discovered an interesting method of utilizing this especial suggestibility produced by the division of consciousness. Although I have no inclination, on this occasion, to occupy myself with anything that relates to the practice of medicine, I may nevertheless point out that our researches in the province of psychology may in case of necessity possess a very great advantage for patients and contribute greatly to the treatment of their diseases.

Up to this point I have investigated only that division of consciousness that is spontaneous, that pre-exists in subjects before any sort of experiment is instituted. M. Janet has invented an ingenious means of effecting an artificial division; it consists in distracting the attention of the subject while some one is talking to him. For example, we take advantage of a moment when the subject is chatting with some other person, or is absorbed perhaps in a fascinating book, to talk to him in a low voice; whereupon a mental bipartition is produced; one part of the subject's mind is conversing with the first-mentioned person, and another part with the second. Two distinct consciousnesses are thus formed, and each one is wholly occupied with the task before it. The suggestions that can be induced in this manner in a subject divided by distraction, are much more efficacious than direct suggestions; they have, in addition, the advantage of being capable of accomplishment without it being necessary to put the subject to sleep, and we warmly recommend this class to all those who seek to alleviate the diseases of hysterical patients.

PARIS, 1889.

THE SOCIOLOGICAL FUNCTION OF UNIVERSITIES.

BY MORRISON I. SWIFT.

HOWEVER superficially we look at society, it is clear that old things are passing away and new things are to be. What once appealed to men, no longer moves them as before. The church is losing its hold, the common schools are attacked, we hear of the university as out of joint with life. So it is necessary to plan movements that all can believe and assist in, particularly with reference to helping the many who are compelled to lead unsanitary lives in cities.

It is important to bear always in mind the central difficulty, and to arrange all sociological and philanthropic schemes with it before us. This central difficulty is that the working people as a class do not receive enough pay for their work, that a considerable portion of the social product that belongs to them, is intercepted before it reaches them. Diluted philanthropy is one thing; anybody can 'slum it' in *coupe* and kids, or send a Christmas turkey to employés whom he underpays all other days of the year; but this sort of philanthropy, and any other that does not have the wage-problem before it, are insufficient.

The people must first learn what to do, and think-

ers ought to be striving to tell them, for the wage-problem is economic and ethical. But our universities are rather exalted and exclusive, and think a little cheaply of propositions to turn energy that might be devoted to monographic historic insights, to the solution of problems that have not yet receded to the realms of pure and cool theory. On themes relating to Socrates and Seneca, or the text in which they spoke, our universities are laudably alive, but is it not curious that in the objects at which those gentlemen aimed, the very same universities are unanimously torpid and comatose? There are living ethical problems, and the great English colleges are cordially facing them, while our representative college people for the most part deem such lay proceedings opposed to the university idea. Perhaps our retrospective feelings will hereafter be more comfortable if we hasten rapidly over this period.

Assuming that the university idea will grow, which cannot be doubted, what shall the university undertake in these modern times, and what can it suitably encourage and support? I will sketch a brief program.

The Kindergarten is the basis of all good educational work. The universities should give more attention to the development of these beginnings. The Kindergarten is likewise the basis of much that is best in sociological work. Every neighborhood in the worse portions of cities should have its Kindergarten-room, and these rooms should be utilized for some of the following projects.

1. *Economic Conferences.* This enterprise has already been initiated in Chicago, where a series of addresses on economic subjects were given to the public by representative men from the camps of labor and capital respectively. The two sides are brought together, the grievances of each are heard by the other. Work of this kind should be organized in every city, and it presents few difficulties.

2. *Concerts and Lectures.* A hall may be obtained in the poorer part of town where from time to time concerts, arranged by the well-to-do, and lectures shall be given free to those specially invited, or at a nominal cost—if concerts—to the public. The low Variety Theatre now occupies the field, and in regard to it we think everybody must agree in its condemnation, with a writer in *The Westminster Review* on "The Characteristics of American Cities." He says, "The 'Varieties' Theatre is a vile cancer, which is eating the life out of many a community in the United States, and nowhere, probably, is there a viler one than in Portland in Oregon. It is to be hoped that in time the municipality may provide for the native working-classes within its limits, entertainments as decent, sober, and honorable as those which the Chinese have provided for themselves. To this a Western critic will at once reply that the 'Varieties' are visited only by the lower class of Americans, and that the vice of these classes stops there; whereas the Chinese—decent enough in public—are in private profoundly immoral, having, in fact, no sense of what morality is. We are convinced that this statement is exaggerated. The 'Varieties' theatre—with its cheap debit of the corruptions of Europe and of the great cities of the American Atlantic coast—does reach and corrupt other than the lowest American classes. A theatre into which decent women will not go, but which their husbands and brothers think it no shame occasionally to frequent, is a public danger which cannot be too soon done away with."* Is it not time to begin to supplant the "Varieties" with something better?

3. *Taking Residence.* Young men, graduate students of the University, and others, may go into those parts of town where higher influences are needed, simply to live. They would continue their studies and work elsewhere as before. Perhaps nothing is so necessary as a movement of this kind, and it involves no machinery. Any one can do it. If the rent of a room in the better quarter of the city can be paid, the less rent in a worse district can be met easier.

4. *University Extension Lectures.* Out of 2d and 3d the Extension Lecture would in time naturally grow.

5. *A University and City Committee.* To promote the mutual interests of the university and city in these and various other ways, to obtain for the city the greatest advantages from the university, and for the university the fullest support of the city, a conference committee, composed of a small number of representative persons from each body, might be established. Every city of importance either contains a university or has one near it.

What would be the results of this expansion of the university? I have elsewhere described some of them, and I will quote from that paper.† "A man in the college or university looks at the world through spec tacles, and it takes him a year or more to learn to conduct himself with perfect rationality in real life. But if he goes at once to teach, he makes his faulty judgments inveterate. A few months with sturdy, unveneered, plain-speaking, substance-wishing men of physical toil would vaporize many dear delusions. A near acquaintance with uncompromising facts and persons wishing to know definitely what to do and re solved to do it, would be invaluable training to him. It would be both a pedagogical and humanitarian study. It would teach him sincerity; it would show him what there is for educated men to do in the world. It would instruct him how to be plain, and direct, and simple, and forever tolerant, for it would let him into

* *The Westminster Review*, July, 1888.

† *Journal of Education*, June 7th, 1888, Art. "University Extension."

the secrets of human nature, laying bare its needs and defects and workings. The average teacher has had no experience with which to compare youths. He has never mingled and struggled with unprofessional men, or visited insane hospitals.

"The educated man should lead society out of its prejudices toward breadth; he should therefore not become an aristocrat nor partial; he should affiliate with all classes. Nothing would lift and educate and encourage the people like this intercourse. The university is the product of all society; wage-workers have helped to create it, their disaffection would annihilate it; the artisan class has then a claim to its direct and intentional interest. A conduit must be formed between the university and the people which will give the latter the immediate benefit of progressive knowledge. The very act of establishing this relation between the working-classes and the highest educators would be an immense stride toward mutual comprehension of classes and social harmony. I have already hinted at its value as helping to furnish truthful conceptions to economist and moralist. It is no less bad to sit in a study and theorize about the needs of an economic class without ever going among them, than it would be to speculate about amputations without having seen a knife; also a morality to-day that does not take hold of actual situations and renovate real lives, that is not social and cannot improve the relations of social classes, is abortive and metempirical. But for this purpose it is necessary to know society and classes intimately."

It will be readily seen that I am inclined to doubt if the university is the highest court of appeal on all subjects. In the days of Lord Salisbury's connection with the *Saturday Review*, when that journal "made a specialty of scorn and contempt for everybody who did not keep hunters or had not graduated from Oxford or Cambridge," the university had a theory of itself at which our time smiles; but the tradition of those days is hardly extinct. "The higher education is not for the helots of society, but for the captains," said some recent writer, and unfortunately this view finds supporters in the university itself. Professor Swing is wiser. "After the youth has passed through the common school, of country or city, self-education not only becomes possible, but easy."* I would say more. The education that a young man may obtain by keeping himself clear of the university, so long as it is subject to the ideas that at present have mastery in it, may be much better than he could obtain in the university itself. The university lessens the personality of many men. But universities are entering upon a period of expansion, and the main question is, When will the breath of life be breathed into this or that educational body?

If there were some single organization devoted not to all reforms and good works but to social reforms specifically, and this were to take these new projects in charge, they would soon prove their feasibility and usefulness. Perhaps the Nationalist Societies which are springing up so rapidly, will appropriate this field. The power of education has not yet been fairly tried in matters that relate to the improvement of society, and it should be the object of an organization for social progress to institute an education based on its conception of society as it should be, and tending to make the better arrangement real. In connection with universities, or with the aid of independent university men, they could inaugurate the work here suggested.

* See article "Aids to Self-Education," in *The Christian Union*, December 6, 1888.

ERNST PRUSSING.

A FUNERAL ADDRESS BY W. M. SALTER.

I COUNT it an honor to say a few words over the remains of this brave and true man. A man of conscience, of stern veracity, of courage; a man who sympathized with forward movements in society and who supported them generously; a man of tender feeling, who loved his family and his friends—the community has none too many such, and we who are here, and many more besides, must mourn his loss. To me he was a personal friend,—a counsellor, a supporter, and I valued his support the more, because there was a touch of magnanimity in it, he not being able to agree with all my views. What a warm-hearted man, what friendliness shone out in his face, how he loved all simple, innocent human joys! "Always young for liberty," said Dr. Channing once of himself; so did Mr. Prussing always seem young for truth, for right, for humanity. There was a heart of fire in him that made him indignant at injustice, that made him the enemy of degrading superstition, that made him zealous to spread the light, as it was given him to see it. I never met a man who rang truer. Of many persons you cannot say where they stand—how much is real, how much is sham in their professions. What Mr. Prussing said he believed, and what he believed he said; there was no sham in him—he was a living illustration of those earnest words of the poet,

> "Speak thou the truth, let others fence,
> And trim their words for pay;
> In pleasant sunshine of pretence
> Let others bask their day.
>
> "Show thou the light. If conscience gleam
> Set not thy bushel down;
> The smallest spark may send a beam
> O'er hamlet, tower and town."

Mr. Prussing showed the manhood that was in him, when, while still a university student in the Fatherland, he enlisted in a company of volunteers that swore fidelity to the Revolutionary principles of 1848. For

that loyalty to conscience, he was compelled in 1849 to leave his native land; and what was the old world's loss, was the new world's gain. He came to this city of Chicago at once and after three years of work for others, established himself in a business, which he honorably pursued almost to the time of his death. Here, too, he espoused the cause of freedom. He was an abolitionist when to be such was not the honor that it has since become; he had for personal friends some of the leaders in that movement. What effort to promote freedom and progress in religion has he not seconded in our midst? If a man or a cause was worthy of his friendship, when did he ever fail to bestow it? And if he was ever mistaken in judgment, his error but showed his generous heart. He was devoted to just politics—to politics with principle in it; he strove for juster methods of taxation, he believed in a state without a church or any remnants of one, he wished all property, ecclesiastical or other, taxed on equal terms. He served our city faithfully as a member of the Board of Education. He welcomed the idea so contrary to the reigning custom, of bringing the purifying and cleansing influence of fire to bear upon the remains of the dead, and so leaving the earth sweet and wholesome for those who came after; In accordance with his wish, his own remains will be disposed of in this manner.

And now upon this active, earnest life have fallen the shadows of death. For him death had no terrors. He knew that, as Lord Bacon says, "It is as natural to die as to be born," and as I have heard how quietly, how painlessly he drew his last breath, I have thought of those other lines of Bacon, "He that dies in earnest pursuit, is like one that is wounded in hot blood, who for the time scarce feels the hurt."

My friends, what real harm can there be in that which happens to all alike, which is a part of the order of nature? And who knows what is death and what comes after? In the absence of knowledge, we fear; but why should we not, with as good logic, trust and hope? And whether we fear or whether we hope, what difference can it make to a man as to the reasons for noble living now? Socrates, not knowing much of the things below, was convinced that he did not know; but this he did know, that to do wrong and disobey any one, whether God or man, who is better than yourself, is wicked and shameful. It gives one immense rest to know that the life of truth and justice and love is not an arbitrary prescription from without, but is the dictate of man's own conscience and heart. It was this serene consciousness to which he attained, in whose honor we are gathered to-day; he followed his own heart, and because his heart was pure, his life was full of sweet satisfactions and he gave comfort and cheer and joy to all about him.

He has gone from us—gone from wife and daughters and sons, on whose sacred sorrows I shall not here intrude, gone from those who loved and honored him as friend; but he lives on as a presence in our memories and in our hearts. Who of us will forget him, who of us does not feel that his life is richer for having known him, who of us will not feel a new reason for fighting the battles of justice and right in the world now that this valiant soldier has laid down his arms? These human lives of ours are at best very short. "Do not act," said the Emperor Aurelius, "as if thou wast going to live 10,000 years. Death hangs over thee. While thou livest, while it is in thy power, be good." Ah, what work there is to do in the world, and how indifferent and self-concerned we are often in the midst of it! How little we do for humanity, how much we try to do for ourselves! How we conform to the customs and traditions of the world, instead of being nobly true to our own thought and our best convictions! Such was not the type of this man. O ardent, zealous, unselfish soul, too soon with all thy years passed away from earth, may we be like thee, may we honor thee by taking up afresh the work which thou hast laid down!

DREAMS AND HALLUCINATIONS.

In the artificial sleep of hypnosis the dream-images are as perfectly real as in natural sleep, and in post-hypnotic suggestions the images likewise appear equally real, to such a degree, that a subject is very seldom able to distinguish them from reality. It seems as if even a fever-patient could more easily discern between truth and delirium than the hypnotic subject.

Concerning the reality of suggested hallucinations Professor Forel says:

> I have frequently made the following experiment. During the hypnosis I told Miss L., that on awaking she would find two violets in her lap, both of them natural and beautiful, and that she would give me the prettier flower; but I laid a real violet on her lap. On awaking she beheld two violets; one was brighter, more beautiful, she said, and therewith she gave me the corner of her white pocket-handkerchief, but kept for herself the real violet. I now asked, whether she believed that both violets were real or, whether one of my supposed presents, known to her from previous experience, were among them. She said, that the brighter violet was not real, because on the pocket-handkerchief it looked so flattened.

In this case the subject could distinguish to some extent the hallucination from reality. Forel continues:

> I repeated the experiment with the suggestion of three real, equally dark violets, not at all flattened, but fragrant, with stem and palpable leaves; but I only gave her one genuine violet. This time Miss L—— was completely deceived, and was utterly unable to tell me, whether one of the violets or two, or indeed all three, were real or suggested; all three, as she thought, were this time genuine; at the same time she grasped with one hand the air, and held the genuine violet in the other.

Hence we learn, that when we suggest sensations for all the senses, the illusion is complete.

For example, I hand to another hypnotized lady a real knife, and tell her, that there are three. Though fully awake she is absolutely unable to distinguish the supposed three knives one from another, not even if she employs them for cutting, if she touches them, or drums on the window-pane. When other persons later derided her on the score of her illusion, she grew angry, and firmly maintained, that there had been three knives, that I only later had hidden two of them; she had seen all three knives, felt, heard them, and would not yield on this point."

Bernheim once gave to a patient of his hospital in an hypnotic state the following suggestion:

"In six days, during the night between Thursday and Friday, you will see the nurse come to your bed and pour cold water over your feet." On the following Friday, she loudly complained that the nurse had poured cold water on her feet during the night. The nurse was called, but naturally denied it. He then said to the patient:—"It was a dream, for you know how I can make you dream; the nurse has done nothing."—She emphatically declared, that it was no dream; for she had clearly seen it, felt the water, and become wet."

Beaunis relates the following suggestion, which may at the same time serve as a natural explanation of second sight:

"On the afternoon of the 14th of July, 1884, I hypnotized Miss E., and gave her the following suggestion: "On the first of January, 1885, at 10 A. M., you will see me; I shall come to wish you a happy New-Year; after that is done I shall immediately disappear."—I did not mention this suggestion to anybody. Miss E. lives in Nancy. I was myself in Paris on the first of January, 1885. That day, Miss E. told a friend, a physician and several other persons, that on the same day, at 10 A. M., when she was in her room, she heard somebody knocking at the door. She said: 'Come in!' and to her astonishment saw me enter, and heard me with a cheerful voice wish her a Happy New Year. I immediately went out; she at once hastened to the window to see me leave the house, but did not see any further trace of me. To her surprise, she also noticed that I, at that season, had come to her in a summer dress. (The same clothes that I wore at the time of the suggestion.) Her attention was in vain called to the fact that I was in Paris on the first of January, and could not have come to her on that day. Nevertheless she maintained that she had seen and heard me, and she is still convinced of that, in spite of my declarations that it was impossible."

One of the strangest facts as to the reality of hallucinations is the observation of Messrs. Féré and Binet, that the laws of optics hold good for suggested images as well as for real ones. Thus they suggested to a hypnotized subject that she would see a portrait on a table. The subject when awakened saw the portrait, and when Dr. Féré placed a prism before her eye, she was greatly astonished to see the portrait double. Dr. Féré informs us that the subject had no education and could not possibly have any idea of the qualities of a prism. Other instruments had in the same way their natural effect. The mirror reflected the suggested image, while an opera glass brought it nearer, and if inverted, projected it to a greater distance. Yet upon close examination, it was found that the magnified picture only showed larger proportions, but revealed no finer details than could be seen with the naked eye.

There is, accordingly, a difference between dreams and hallucinations. Dreams are, as a rule, products of inward incitements solely. Suggestions, however, are associated with certain external sensations. If the suggestion is given that a subject will see a bird on her hand, she will see, before a mirror, the reflection of her hand and with the hand also the bird reflected. Whatever change the object suffers with which the suggestion is associated, the same will be observed in the suggestion.

There is a story about a man who when going to bed put slippers on his feet and armed his eyes with spectacles, because he used to dream that he stepped into glass-splinters which caused him much pain. He did not notice the glass in his dreams, because of his shortsightedness.

We are not informed of the success attending his remedy, but if the frequent occurrence of the odd dreams had to be attributed to an itching in his soles, if, as we suppose it did, the pain existed first and the dream consisted in an interpretation of the pain, the ingenuous method of protecting his feet with slippers, it is most probable, was of no avail.

It would be different if a hypnotic subject had been told that the surface of the lawn was strewn with glass. In that case he would feel innumerable wounds in his feet, if he walked over the lawn bare-footed, but he would be protected against the pain if he saw that a thick leather sole remained between himself and the grass.

The reality of dreams, which subjectively considered cannot be distinguished from the reality of sensations, is the source of many errors in philosophy, as well as religion. Schopenhauer * derives from this fact his idealism. The subjectivity of the world, (*i. e.*, the world in so far as it is my conception, the world as it appears to me) is mere appearance (*Erscheinung*); it "is in this respect akin to dream"; Schopenhauer says, "it belongs to the same class. The same cerebral function which in sleep produces an objective, visible, and palpable world must be no less active in the production of the objective world in the waking state."

Schopenhauer claims, and undoubtedly he is right, that there is a remarkable difference between dreams and the play of our imagination. Yet it is a difference of degree not of kind. The imagination of the savage is real and objective like the images of dreams, while the imagination of the philosopher and the inventor is more abstract. The poet—at least the modern poet—may often stand between both. Even such a man as Goethe, critical though his mind was, could not entirely free himself from visions. Yet we must remember

* *Welt als Wille und Vorstellung*, Vol II, p. 4.

that the account of his vision is reported in a book which he entitled *Wahrheit und—'Dichtung.'* It seems probable that memory pictures appear real only when innervated by the nerve-fibres that rise from the central ganglions of the brain. These nerve-fibres being the usual channels for the transmission of sensory impressions, it seems natural that the effect of their innervation is the same whatever the cause of their irritation may be. The commissural fibres, however, that serve the purpose of association, cannot have a stronger effect in dream than in the waking state. The innervation by commissural fibres awakens conceptions and images only in such a way as they appear in our imagination.

The savage who is almost incapable of abstract thought, will naturally be limited to an imagination of palpable visions, while the thinker or the inventor, whose brain is filled with commissural fibres, can better dispense with the dreams of the waking consciousness and exercises his imagination chiefly in abstract thought.

The life like corporeality of dreams appears natural when we consider the physiology of sensations and the kinship that obtains between sensations and dreams. There is no evidence, as Schopenhauer imagines, for our possessing a special organ of dream which he supposes to have its seat in the great sympathetic plexus; and still less can it prove that the soul is endowed with the power of producing an extended world out of itself. Schopenhauer says, "As the stomach and the bowels change everything which they digest into chyle, thus the brain reacts upon all irritations by producing tridimensional images, subject to the law of causality." We see no possibility that a being whose sensations were always tridimensional, should have four-dimensional visions in his dreams.

In concluding this essay we call attention to the fact that the life-like reality of dreams must be considered as the origin of man's belief in ghosts. In Homer we find the following passage:

"Hush'd by the murmurs of the rolling deep,
Achilles sinks in the soft arms of sleep.
When lo! the shade, before his closing eyes,
Of sad Patroclus rose. He saw him rise
In the same robe he living wore. He came
In stature, voice, and pleasing look the same.
The form familiar hover'd o'er his head,
"And sleeps Achilles (thus the phantom said:)
Sleeps my Achilles, his Patroclus dead?
Living, I seem'd his dearest, tenderest care,
But now forgot, I wander in the air,
Let my pale corse the rites of burial know,
And give me entrance in the realms below."
"And is it thou? (he answers) To my sight
Once more return'st thou from the realms of night?
O more than brother! Think each office paid,
Whate'er can rest a discontented shade;
But grant one last embrace, unhappy boy!
Afford at least that melancholy joy."
He said, and with his longing arms essay'd
In vain to grasp the visionary shade!
Like a thin smoke he sees the spirit fly,
And hears a feeble, lamentable cry.
Confused he wakes; amazement breaks the bands
Of golden sleep, and starting from the sands,
Pensive he muses with uplifted hands:
"'Tis true, 'tis certain; man, though dead, retains
Part of himself; the immortal mind remains;
The form subsists without the body's aid,
Aërial semblance, and an empty shade!
This night my friend, so late in battle lost,
Stood at my side, a pensive, plaintive ghost:
Even now familiar, as in life, he came;
Alas! how different! yet how like the same!"

Dreams were considered as caused by the hovering phantoms of the departed spirit. This we know is an error. Yet let us not forget, that there is a truth even in this superstition. The vision of our dream is a reality, although there is no ghost standing at our bedside. The images of the deceased continue to live in our brains, they continue to influence our actions and prove themselves in many cases most powerful presences. Shakespeare depicts in several of his dramas, how real are the ghastly shadows of innocent victims in the imagination of the murderer. And how often is the memory of a mother a veritable blessing to her child, better and more valuable than the inheritance of wealth and worldly goods. P. C.

CORRESPONDENCE.

GOD IN EVOLUTION.

To the Editor of THE OPEN COURT:—

A FEW words from me in reply to the statements contained in Mr. T. B. Wakeman's article, entitled, "Slandering the Universe," will not be inappropriate.

In the first place, I deny that the world is "plainly" inorganic in its great mass of matter forming stars, suns, and planets. Hypothetically it may be so, but of the constitution of the heavenly bodies we are ignorant, except so far as the spectroscope informs us of the existence on them of certain gases, metalloids and metals. For what we know to the contrary, organic life may play a much more important part in other spheres than it does on the earth. We are at least justified in assuming that organic life is present on such of the heavenly bodies as are fitted for its existence.

Secondly. We do not know inorganic matter in *five* forms. Mr. Wakeman cites Hæckel's "Descent of Man," Vol. I, p. 156, on the subject of growth, and there the renowned German writer speaks of four different *conditions* of density or aggregation, of which *three* are of inorganic bodies, and the fourth is the organic condition. He adds, "the inorganic bodies may be either in a solid, fluid, or gaseous condition. They grow by apposition. Organic bodies, on the contrary, are in the fourth, the soft or semi-fluid condition of aggregation."

Thirdly. Therefore, what Mr. Wakeman calls the "viscid or colloid, *i. e.*, jelly form" of matter is organic, as he himself immediately afterwards affirms in calling it *protoplasm*. No one denies that feeling and consciousness are natural, under certain conditions, to this living matter, but its existence has first to be accounted for. Hæckel (Vol. II, p. 50,) explains it by saying, "for the origin of the first monera upon our globe, the assumption of spontaneous generation is a necessary hypothesis."

Mr. Wakeman settles the question by first making "viscid or colloid" matter inorganic, and then calling it protoplasm! Hæckel's hypothesis assumes the original spontaneous generation of more than one moner, but Dr. W. T. Thiselton Dyer declares in the

Ency. Brit., *Art.* "Biology," that "if all living beings have been evolved from pre-existing forms of life, it is enough that a single particle of living protoplasm should once have appeared on the globe, as the result of no matter what agency. In the eyes of a consistent evolutionist any further independent formation of protoplasm would be sheer waste." With this conclusion Mr. Wakeman's definition of life, as "the natural action and reaction" of protoplasmic organisms, is not consistent. How could there be such "action and reaction" with only one particle of protoplasm? If he prefer to side with Hæckel, he will still have to solve the problem of spontaneous generation, which is not simplified by his statement of its conditions.

That organic bodies resembling lumps of jelly are to be met with on the seashore, is no proof that inorganic matter produces either protoplasm, or any of the other varieties of colloids referred to by Mr. Wakeman. Nor would the existence at the bottom of the sea of the fabulous monster to which Professor Huxley gave the name of Bathybius. It is a case of pure assumption arising from the necessity of the received hypothesis of material evolution; and so also is the assertion that, as life and consciousness are *attendant upon* "the action and reflex reaction of protoplasmic bodies," therefore they are the *results of* such action and reaction. This cannot be true if, as evolutionists assert, protoplasm was spontaneously generated. Hæckel declares (Vol. II, p. 45,) that the structureless amœba, to which he gives the name of moner, exercises "the organic phenomena of life, of nutrition, of reproduction, sensation, and movement," and these functions must have been exercised by protoplasm at its first appearance.

Finally, while thanking Mr. Wakeman for the expression of his opinion in the opening sentence of his speech, I would reply that, instead of my essay being an argument in support of dualism, it embodies a special phase of monism, based on the impossibility of accounting for the origin of life, excepting on the hypothesis of the existence of a living essence throughout the universe. The arguments of Mr. A. R Wallace, the most consistent advocate of evolution through the agency of natural selection, in support of the existence of a world of spirit and its agency in the three stages in the development of the organic world, have never been answered. Mr. Wakeman may apply the word "spook" to the universal principle of life denoted by the term "Deity" or "God," but by so doing he cannot alter facts. I still maintain that without such a principle the universe would lack vital energy, and that if it exists it must have a certain personality, although not the exercise of a creative power, nor necessarily a preconception of the forms of organic life on the earth. The universe may have a world-spirit without its being haunted by "spooky co-tenants." This is a very different question, as to which, however, reference may be made to the suggestive article by the Rev. M. J. Savage which appeared in the December number of the *Forum*.

C. Staniland Wake.

GOETHE A SAFE MORAL GUIDE.

To the Editor of The Open Court:—

In your number of December 5th, page 1976, Mrs. Susan B. Channing writes thus:

"It may be safely asserted that the writers who have corrupted the morals and debased the hearts of their youthful readers, have been, as a rule, celibates. Goethe is certainly not a safe guide. It is doubtful whether his *Faust*, *Wilhelm Meister*, *Elective Affinities*, *The Sorrows of Werther*, have not done more harm than good to the young."

All this is very mysterious to me. Has Mrs. Channing the impression that Goethe was a celibate? Or does the saving quality of wedlock consist to her mind not in the mutual fidelity of husband and wife, but in an ecclesiastical sanction? Or had her opponent (I have not now Mr. Luce's letter before me) referred to Goethe as noe of his capable bachelors, and does she take this method of capturing a pawn in the argument when she might have had king, queen, and castle, by claiming him as a married man? In any case it seems proper to observe that from the time of his marriage in 1788 Goethe was an exemplary family man. For many years, to be sure, the marriage was only a conscience-marriage, but that is precisely the kind of tie to test a man's moral fibre; and I know of no evidence that Goethe was ever unfaithful to his wife. The pair lived in happy companionship and devoted attachment to each other until the death of Frau Goethe.

As to the corrupting influence of Goethe's works upon the "young," that is old straw which I do not now wish to thresh over. I do wonder, however, why *Werther* should appear in the above list. I can think of nothing in that which even a very keen-scented pruriency could find to feed on. And why should the *Elective Affinities* be mentioned in such a connection? The book was written largely for the express purpose of counteracting the loose notions of marriage which prevailed extensively in German society at the beginning of the century. It is a campaign pamphlet on the importance of husband and wife's cleaving to each other and guarding carefully the avenues of their affection. I do not see how any actual reader of the book could think it immoral unless he also condemned the parable of the prodigal son. As to *Meister* there is perhaps more room for discussion. That is certainly not a book for children; but then children do not and cannot read it. The dulness of the story is an all-sufficient solvent of any harm it might conceivably do to the very young. And as with *Meister*, so with *Faust* No one can read either until he is old enough to distinguish between depicting immorality and recommending it. And one who is old enough for that—old enough to read *Hamlet* without feeling his own homicidal propensities in the least excited by the killing of Polonius, or wishing to hang Shakespeare for the murder—is old enough not to allow his thoughts to be diverted from the higher aspect of a poet's work and fixed on its incidental sensualities.

The world is full of people who find in Goethe a perpetual source of ethical inspiration and ennoblement; but I would willingly undertake to found an asylum or build a monument (commemorative of unmatched stupidity) for any well authenticated case of man, woman, or child whose "morals" have been "corrupted," or whose "heart" has been "debased," by the reading of the great poets's works. Goethe is an eminently safe "guide" for young or old, married or single, provided they only read *him* and study him intelligently in the light of known facts, instead of making up an opinion at second hand out of what Peter, James, and John have chosen to write *about* him.

Respectfully Yours

Ann Arbor. Calvin Thomas.

NOTES.

The second number of the new magazine, *The Arena*, is in every respect equal to the first. Mr. Ingersoll writes upon "God in the Constitution," Dion Boucicault upon "Spots in the Sun," *videlicet* Shakespeare, Lawrence Gronlund upon "Nationalism,' Mr. Pentecost upon "The Crime of Capital Punishment," Henry George upon the means "To Destroy the Rum Power," and W. H. H. Murray furnishes a graceful legend of the Saguenay entitled "The Mamelons." A comment may be made upon the *Arena's* motto, selected from Heine, "that we do not take possession of our ideas, but are posessed by them; they master us and force us into the arena, where like gladiators we must fight for them." The battle we allow; but our ideas are we ourselves; we are bundles of ideas, and *theirs* is the conflict in the arena; to speak of their possessing us and forcing us contains a tinge of dualism, for which we must take even Heinrich Heine to task. Few magazines present such a rich variety of solid and entertaining matter as *The Arena* in its first two numbers has afforded us, and we hope that each succeeding month will find it equally as effective and instructive.

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